Listing of the Claims:

1.   (canceled).

2.   (canceled).

3.   (canceled).

4.   (currently amended) A method for the enrichment of neural progenitor cells comprising RET protein, said method comprising:

a) combining a mixed population of cells comprising neural-crest derived cells comprising neural progenitor cells with an antibody that specifically binds to at least part of a ~~a~~ an extracellular sequence of said RET protein; and

b) selecting for RET positive cells;

c) culturing said RET positive cell; and

d) selecting a subpopulation of said RET positive cell which produces neuronal progeny as neuronal progenitor cells; or

e) selecting a subpopulation of said RET positive cell which produces both neuronal and nonneuronal progeny as proneuronal progenitor cells; or

f) selecting a subpopulation of said RET positive cell which produces nonneuronal progeny as nonneuronal progenitors cells ~~, whereby said mixed population of cells is enriched for neural progenitor cells~~.

5.   The method according to claim 4 wherein said antibody is selected from the group consisting of polyclonal antibody, monoclonal antibody, antibody fragments, and single chain antibody.

6.   The method according to claim 5, wherein said antibody is fluorochrome conjugated.

7.   A method according to claim 6, wherein said selecting with said flurochrome conjugated antibody is by flow cytometry.

8.   The population according to claim 16 wherein said cells are nonneuronal progenitor (NNP) cells.

9-11.   (canceled).

12.   The population according to claim 16 wherein said neural progenitor cells are bound to an antibody that specifically binds to RET antigen.

13.   The population according to claim 12 or 16 wherein said antibody is selected from the group consisting of polyclonal antibody, monoclonal antibody, antibody fragments, and single chain antibody.

14.   The population according to claim 13 wherein said antibody is a monoclonal antibody.

15.   (currently amended) A method for the enrichment of neural progenitor cells, said method comprising:

a) combining a mixed population of cells comprising neural-crest derived cells comprising neural progenitor cells comprising RET protein with ~~a monoclonal~~ an antibody that specifically binds to at least part of ~~a~~ an extracellular sequence of said RET protein; and

b) selecting for RET positive cells;

c) culturing said RET positive cell; and

d) selecting a subpopulation of said RET positive cell which produces neuronal progeny as neuronal progenitor cells; or

e) selecting a subpopulation of said RET positive cell which produces both neuronal and nonneuronal progeny as proneuronal progenitor cells; or

f) selecting a subpopulation of said RET positive cell which produces nonneuronal progeny as nonneuronal progenitors cells, ~~whereby said mixed population of cells is enriched for neural progenitor cells~~.

16.   (currently amended) A substantially pure population of neural crest derived neural progenitor cells comprising RET protein prepared using ~~antibody binding to RET protein~~ the method of claim 15, where said cells are proneuronal progenitor (proNP) cells, neuronal progenitor (NP) cells and/or nonneuronal progenitor (NNP) cells.